



# Jefferson Lab Alignment Group

## Data Transmittal

**TO:** Jay Benesch

**DATE:** 02 May 2006

**FROM:** Chris Curtis

**Checked:**

**# :** L1056

**DETAILS:**

data: m:\align\data\step2a\necr\060117a  
data: m:\align\data\step2a\swcr\060125a  
data: m:\align\data\step2a\earc\060117a  
data: m:\align\data\step2a\warc\060117a

Below are the results of the location survey of harps in the accelerator arc and extractor regions. Since all of these components were measured in a local system (i.e. relative to the center of the nearest quad, listed bold) only a DS is given (distance along beamline), together with a derived Z coordinate where the beam is parallel to the linacs. The ideal coordinates of the quads are shown in meters in the machine system with the center of the accelerator at Z=0, X= 0 and Y=100. The DS is given in millimeters, with a positive DS being downstream. Accuracy is estimated at +/- 1mm.

<b>Component</b>	<b>Z (m)</b>	<b>X (m)</b>	<b>Y (m)</b>	<b>DS (mm)</b>	<b>DX (mm)</b>	<b>DY (mm)</b>
<b>QB1E03 ctr</b>	<b>184.6638</b>	<b>80.6000</b>	<b>102.0000</b>			
HA1E03 ctr	185.5717			907.9	**	**
<b>QB2E03 ctr</b>	<b>-184.6638</b>	<b>-80.6000</b>	<b>102.0000</b>			
HA2E03 ctr	-184.1001			-563.7	**	**
<b>QB1A21 ctr</b>	<b>281.8138</b>	<b>0.0000</b>	<b>102.0000</b>			
HA1A21 ctr				1032.6	**	**
<b>QC2A21 ctr</b>	<b>-281.8138</b>	<b>0.0000</b>	<b>102.0000</b>			
HA2C21 ctr				1033.2	**	**